

CLAIMS

What is claimed is:

- 1 1. A magnetic disk for a hard disk drive, comprising:
 - 2 a substrate;
 - 3 a S1 magnetic layer located over said substrate;
 - 4 a layer of ruthenium located over said S1 magnetic
 - 5 layer;
 - 6 a layer of chromium located over said layer of
 - 7 ruthenium; and,
 - 8 a top magnetic layer located adjacent to said layer of
 - 9 chromium.

- 1 2. The disk of claim 1, further comprising a S2
- 2 magnetic layer located adjacent to said layer of chromium
- 3 and said layer of ruthenium.

- 1 3. The disk of claim 1, further comprising an
- 2 underlayer located between said substrate and said S1
- 3 magnetic layer.

- 1 4. The disk of claim 1, further comprising an overcoat
- 2 layer located over said top magnetic layer.

1 5. The disk of claim 4, further comprising a layer of
2 lubricant located over said overcoat layer.

1 6. A hard disk drive, comprising:
2 a base plate;
3 a spindle motor coupled to said base plate;
4 a disk coupled to said spindle motor, said disk
including;
5 a substrate;
6 a S1 magnetic layer located over said substrate;
7 a layer of ruthenium located over said S1 magnetic
8 layer;
9 a layer of chromium located over said layer of
10 ruthenium;
11 a top magnetic layer located adjacent to said
12 layer of ruthenium;
13 an actuator arm mounted to said base plate;
14 a voice coil motor coupled to said actuator arm;
15 a flexure arm coupled to said actuator arm; and,
16 a head coupled to said flexure arm and said disk.
17

1 7. The hard disk drive of claim 6, further
2 comprising a S2 magnetic layer located adjacent to said
3 layer of chromium and said layer of ruthenium.

1 8. The hard disk drive of claim 6, further
2 comprising an underlayer located between said substrate and
3 said S1 magnetic layer.

1 9. The hard disk drive of claim 6, further comprising
2 an overcoat layer located over said top magnetic layer.

1 10. The hard disk drive of claim 9, further comprising
2 a layer of lubricant located over said overcoat layer.

1 11. A method for fabricating a disk of a hard disk
2 drive, comprising:

3 forming a layer of S1 magnetic material over a
4 substrate;

5 forming a layer of ruthenium over the layer of S1
6 magnetic material;

7 forming a layer of chromium over the layer of
8 ruthenium; and,

9 forming a top layer of magnetic material onto the layer
10 of chromium.

1 12. The method of claim 11, further comprising forming
2 a layer of S2 magnetic material between the layer of
3 ruthenium and layer of chromium.

1 13. The method of claim 12, further comprising forming
2 an underlayer between the substrate and the layer of S1
3 magnetic material.

14. The method of claim 13, further comprising forming
an overcoat layer onto the top layer of magnetic material.

15. The method of claim 14, further comprising forming

7 a layer of lubricant onto the overcoat layer.